ACTD Operational Management Process

Defense Acquisition University's Transition Manager's Course

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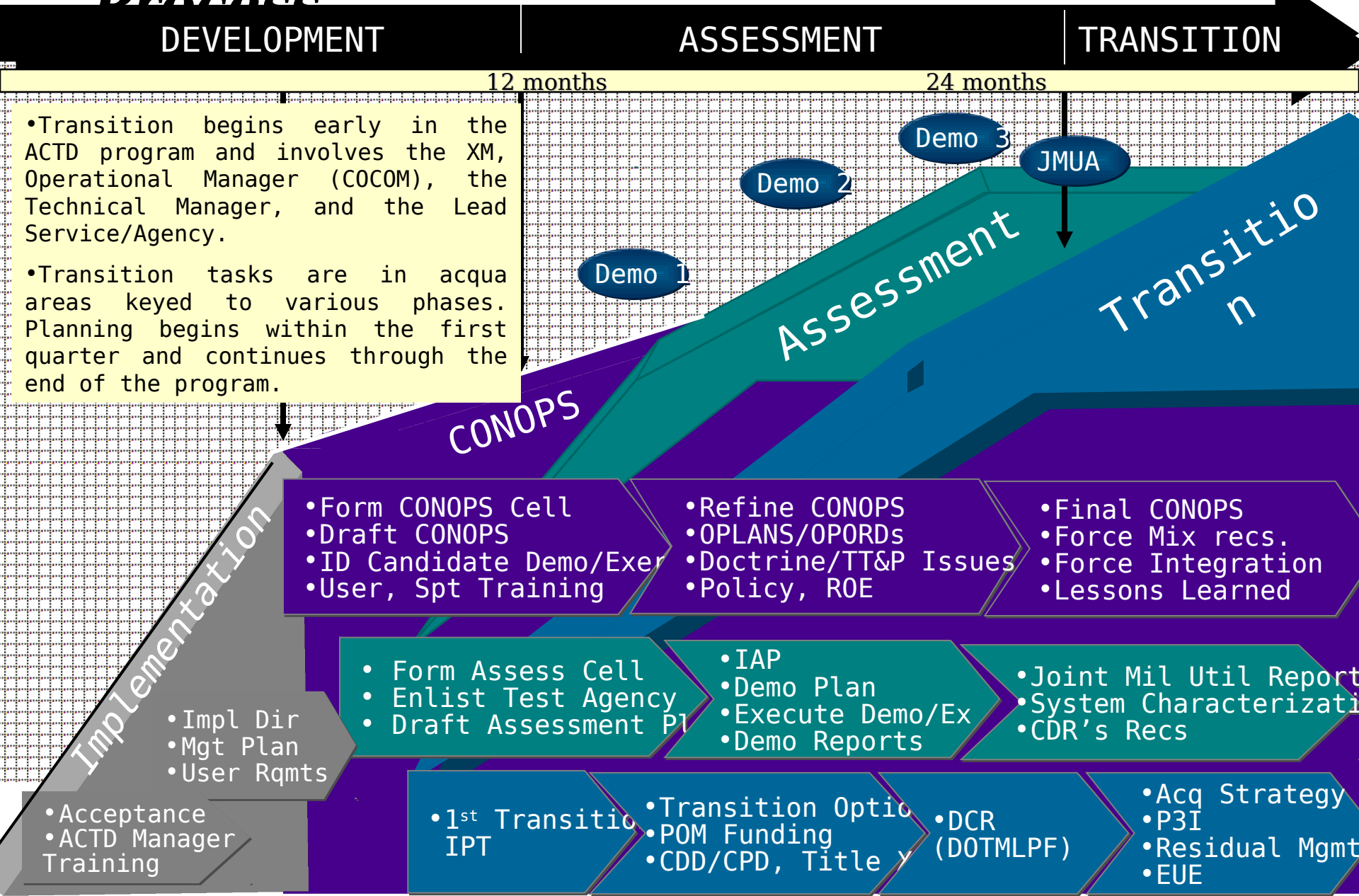
Unclassified

USJFCOM ACTD Focus

Operational Manager's Overarching Guidance

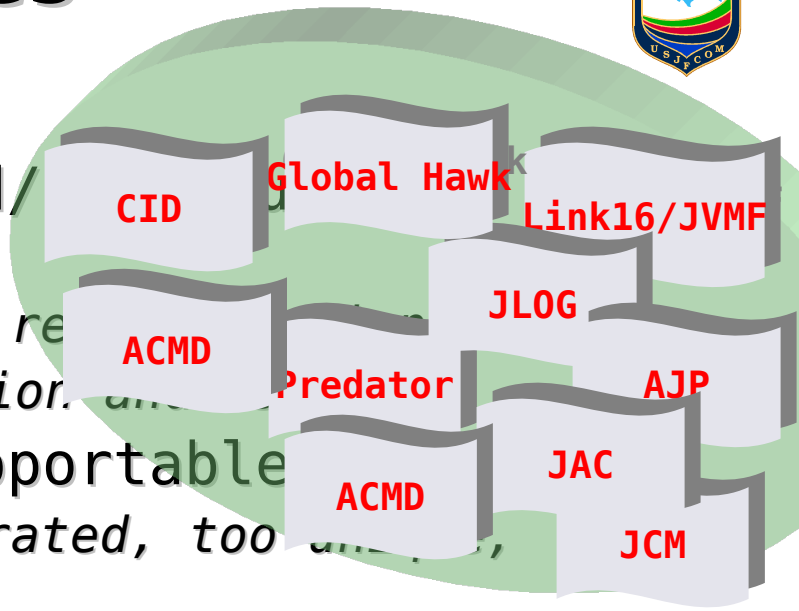
- ACTDs are about the relevant, direct, and rapid application of advanced mature technology to solve joint military problems. OM will concentrate on ***(CAPABILITIES VICE TOOLS).***
- ACTDs can drive doctrine, so OM will focus on how the system will ***enhance or provide unprecedented military capabilities.***
- Describe the ***problem(s)*** you will address, the ***doctrine/TT&P (other DOTMLPF)*** you will affect, the ***end-to-end architecture***, how you will ***operate/sustain system***, and what ***capabilities and products*** will be produced.
- Develop program to ***facilitate rapid and successful fielding*** of new capabilities ***(STAY INVOLVED IN TRANSITION).***

JFCOM ACTD Operational Management Process

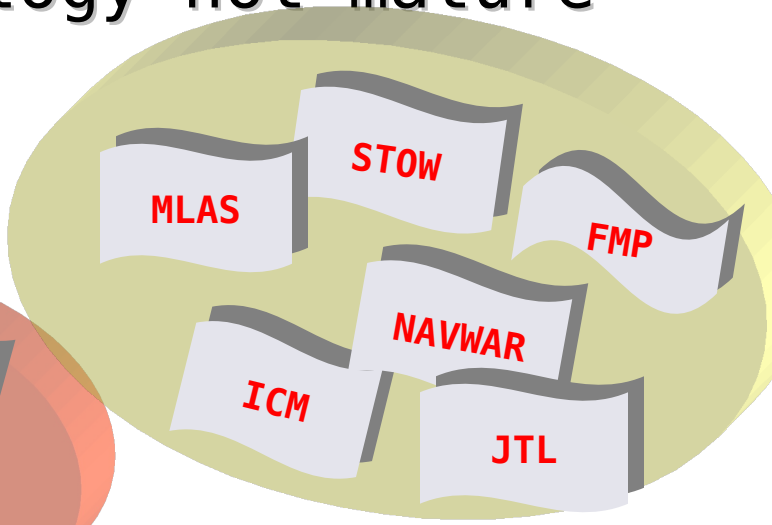


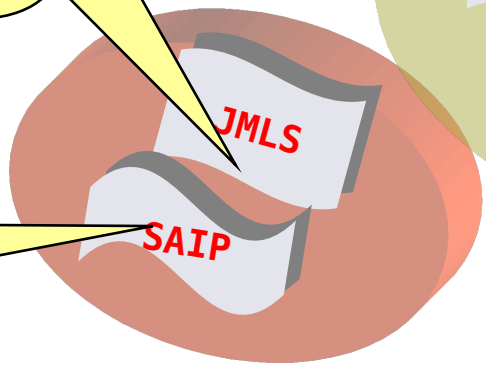
ilitary Utility Outcomes

- Provides Utility - Field and/
  - *Distribute/operate residuals*
  - *Integrate new force structure; re*
  for force mix, system configuration
- Provides Utility but not Supportable
  - *Too* *not fully integrated, too* *large*
- Has *echnology not mature*
  - *Sh* *opment*
  - *Con*
- Has no uti



First-ever USN/USA OPS driven design and development team. Saved time and funds. Sea State 3 concept was too advanced for tech capability. Validated need and Sparked innovation. CONOPS published and driving doctrinal changes.





Saved effort and funds; changed paradigm from "Semi-automated" to "assisted" imagery processing.

How To Do it

- Modeling and Simulation environments
  - Principally model or simulate the environments
  - Little time or funds to model system
- Demonstrations (Tech D
- Exercises (Ops venu
- Real World Events
- Graduation Exercise

Call for FY07 Is now

USJFCOM Joint National Training Capabilities (JNTC)

- *Will create ACTD/JETA exercise objectives*
- *Design events to fully integrate JETAs with CONOPS, JMETLS*
- *JETAs can leverage existing infrastructure*
- *Will suspend or stress doctrine*

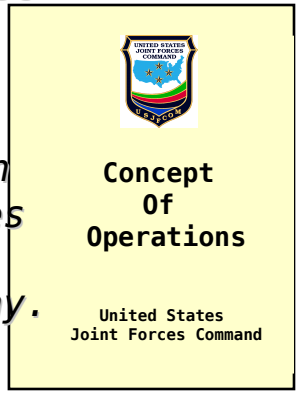
Exercises are at a premium
procedures in other venues and maximize exercise opport

What You Need

- CONOPS to derive operational objectives
- Operational standards and conditions tied to CONOPs objectives
- Redundancy for validity
- Work out rough spots in tech demos/M&S; exercise what you can, extrapolate from data
- Evaluate under variety of OPTEMPOs (crawl, walk, run)
- Evaluate in variety of conditions/environments (wx, battlefield scenarios, geography, etc.)

OM's Role in the ACTD

- **Operational Management**
  - *Daily management of warfighter involvement*
  - *Coordinate component, Joint Staff and other COCOM involvement*
  - *Plan, schedule, execute demonstrations and exercises*
    - **Develop Joint CONOPS with user participation *(COCOMs, Components, Services, Agencies)***
      - *Recommend force mix and force integration plan*
      - *Identify Doctrinal and TT&P concerns and issues*
      - *Address other DOTMLPF issues*
      - *Identify need for Capstone Requirements, if any.*



    - **Assess Joint Military Utility**
      - *Contract with Operational Test Agency*
      - *Develop Integrated Assessment Plan*
      - *Provide Military Utility Assessment Recommendation*
    - **Assist Transition Manager**
      - *Establish Transition Cell (Ops/Tech)*
      - *Broker warfighter input for XM &Transition Plan*
      - *Identify desired residual period & transition outcomes*

Technical Manager's Role

- Develop and Integrate Technology/System
- Manage program funds and contracts
- Deliver system to OM for demonstration and exercises
- Participate in CONOPS development & Assessment Planning
- Manage System Configuration, Training and Documentation
- Co-Develop Implementation Directives, Management Plans
- Participate in Residual & Transition to Acquisition Planning
  - ICD (Implementation), CDD (Milestone B), CPD (Milestone C)
- Support ACTD during Transition

Lead Service or Lead Agency Role

During ACTD Assessment

- Participation in Joint CONOPS development
- Identification of Doctrinal/TT&P issues
- Participation in Assessment Plan Development
- Participation in Demonstrations and Exercises

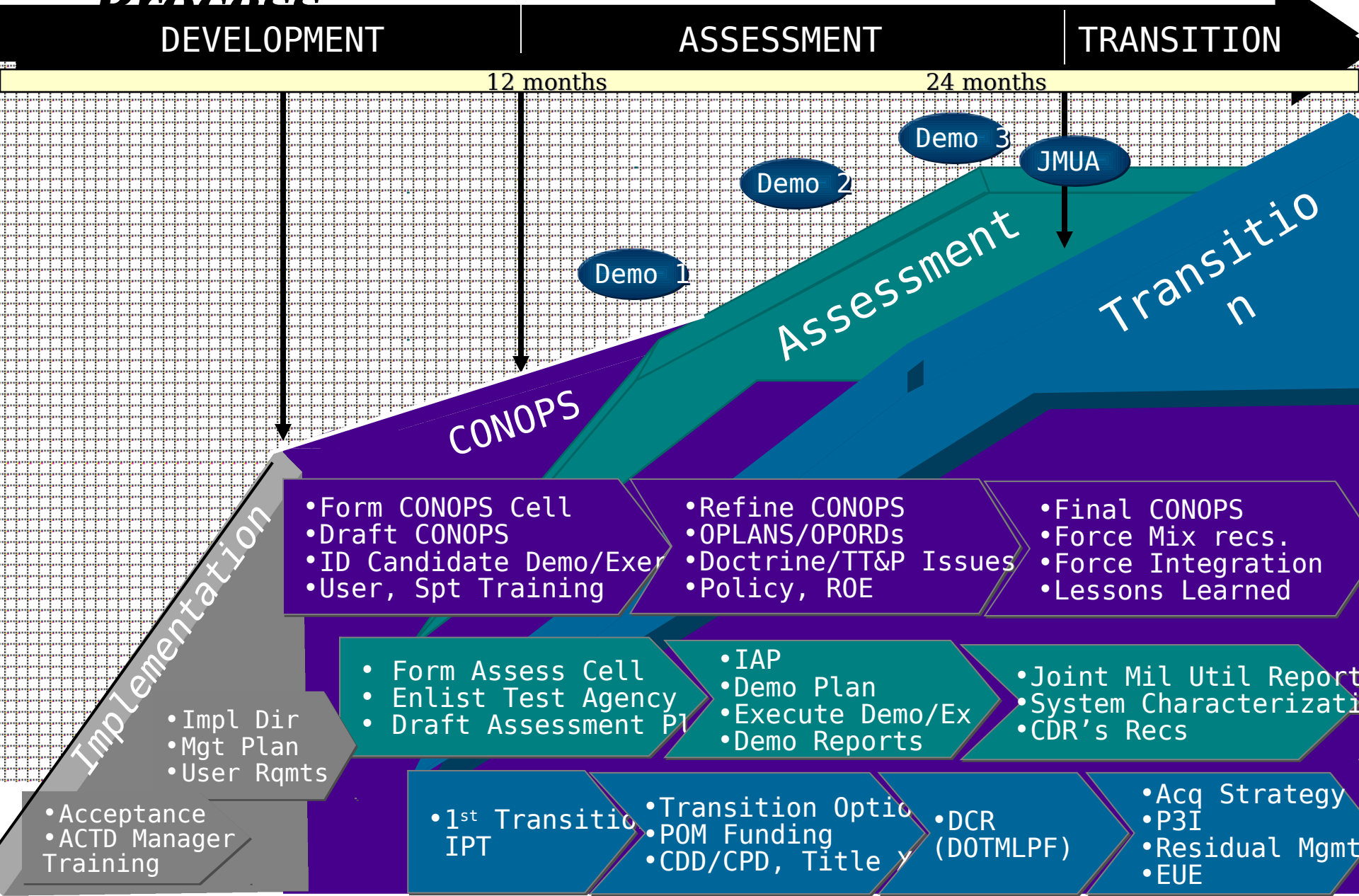
During Transition

- Title X Concerns (Manning, Equipping, Training, Suppor
- ORD Initiation
- POM for transition to acquisition
- Parallel Assessment to gather info on “ilities”
- Follow-on DT and/or OT as required
- Training (Initial and Mission)

ransition Manager's (XM) Role

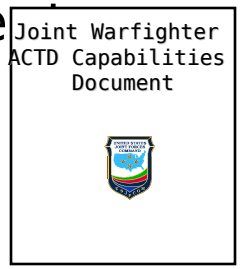
- **Establish & preside over Transition IPT**
  - ***Address Warfighter objectives (OM).***
  - ***Address TM objectives.***
  - ***Coordinate with Lead Service/Agency.***
- **Develop and brief the Transition Plans**
  - ***Residual Management period.***
  - ***Extended User Evaluation (EUE).***
  - ***Transition to Acquisition.***
- **Identify/broker funding for transition/residual period**
  - ***Identify shortfalls early and include in Management Plan***
  - ***Represent Unfunded Requirements (UFRs)***
- **Facilitate ORD/CDD/CPD development by Service/Agency**
- **Coordinate POM with Lead Service/Agency**
- **Participate in Transformation Change Package development and implement DOTMLPF recommendations**

JFCOM ACTD Operational Management Process



Step 1: Validate Joint Capability Needs

- Before the Assessment Begins, the COCOM must Perform Capabilities Assessment and Requirements Validation
  - Identify associated Joint Operational Concepts, Functional Concepts
  - Document gaps ACTD addresses.
    - Review above concepts
    - Review Joint Warfighting Science and Technology Plans
    - Review National Startegy, SECDEF Top Priorities
    - Review Lessons Learned and asscoiated DOTMLPF packages
    - Review existing ICD
    - JROCM
- Prepare an ACTD Warfighter Capabilities document to:
  - Detail the capabilities for development and integration
  - Identify the priority of the capabilities

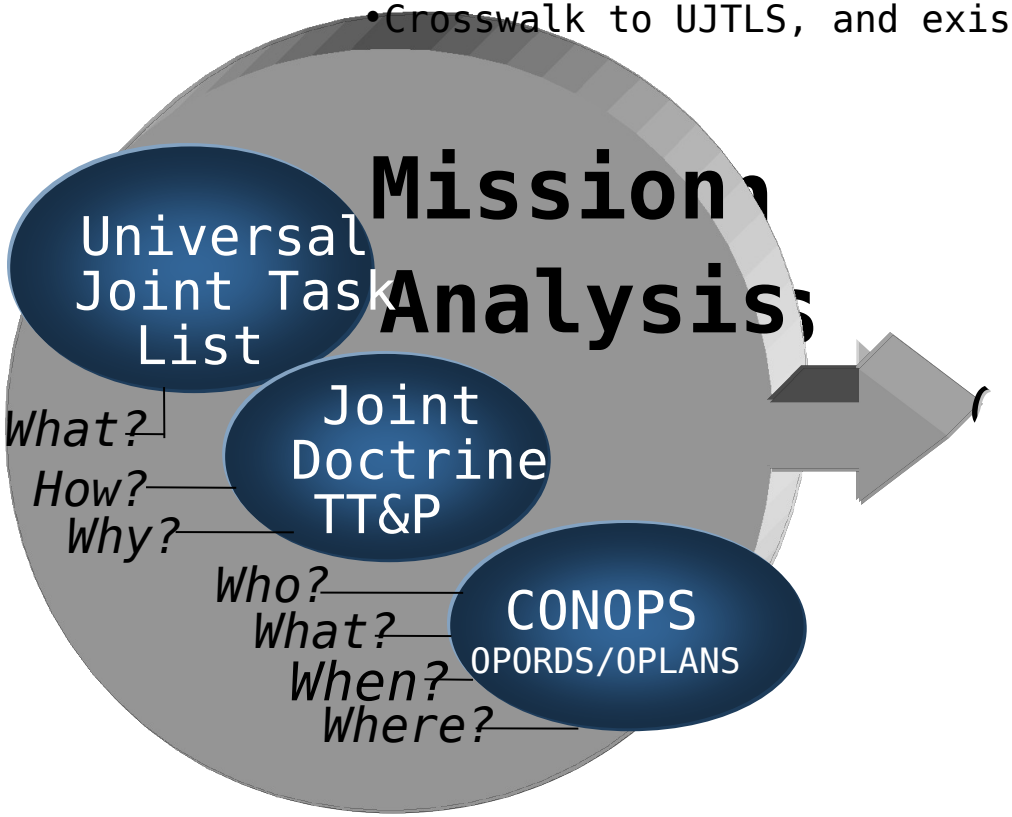


Step 2: Develop CONOPS

- Assessement is driven by CONOPS
  - Assess capabilities, not technology
- Perform Mission Analysis noted on next slide
- Develop CONOPS; TTP

Step 2: Develop CONOPS (con't)

- CONOPS development is the starting point for the assessment plan.
  - Identify Missions, and Critical Operational Issues for assessment.
    - Crosswalk to UJTLS, and existing doctrine.



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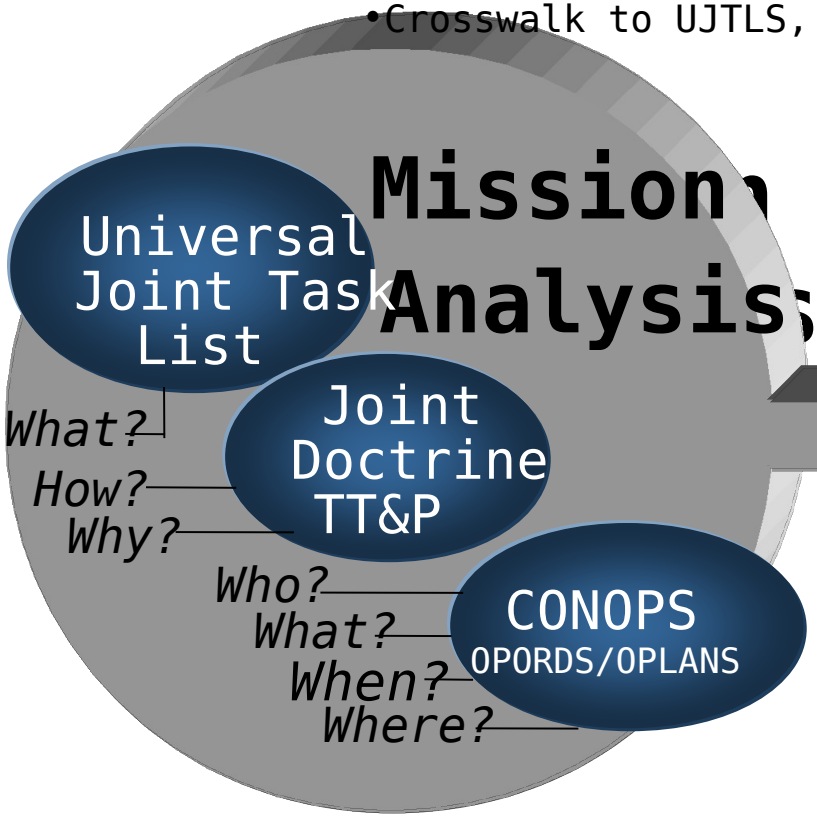

Critical Operational Issues

- **COI 1** – Functionality
- **COI 2** – How ACTD enhances Joint Warfighting Mission Areas
- **COI 3** – Interoperability and Integration
- **COI 4** – Suitability, Vulnerability, Supportability, etc

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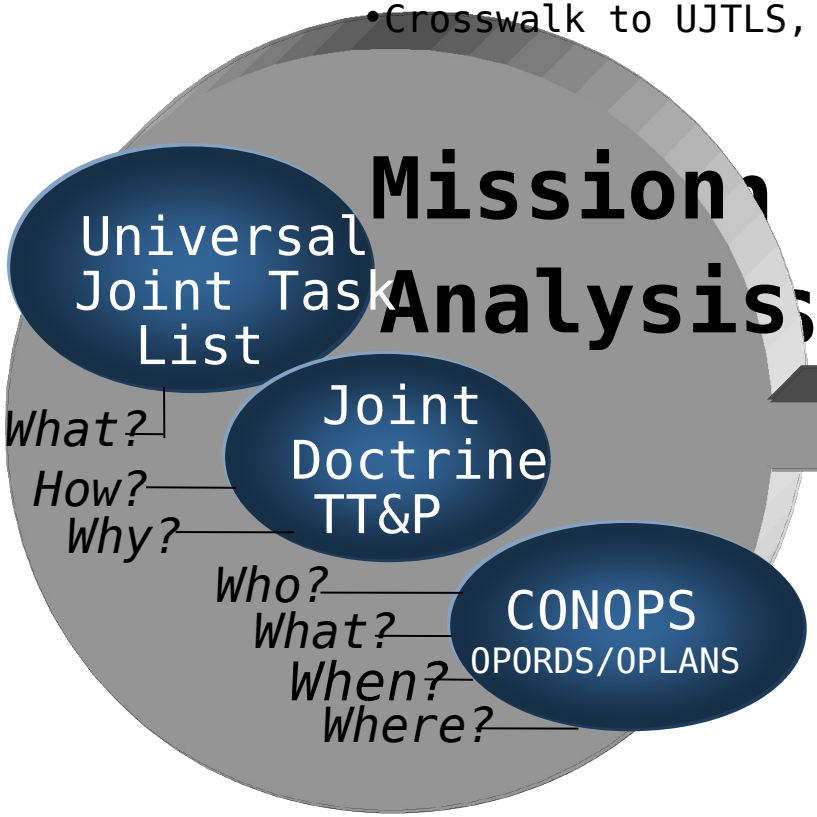

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- COI 1 – Functionality
- COI 2 – How ACTD enhances Joint Warfighting Mission Areas
- COI 3 – Interoperabilit and Integration
- COI 4 – Suitability, Vulner Supportability, etc

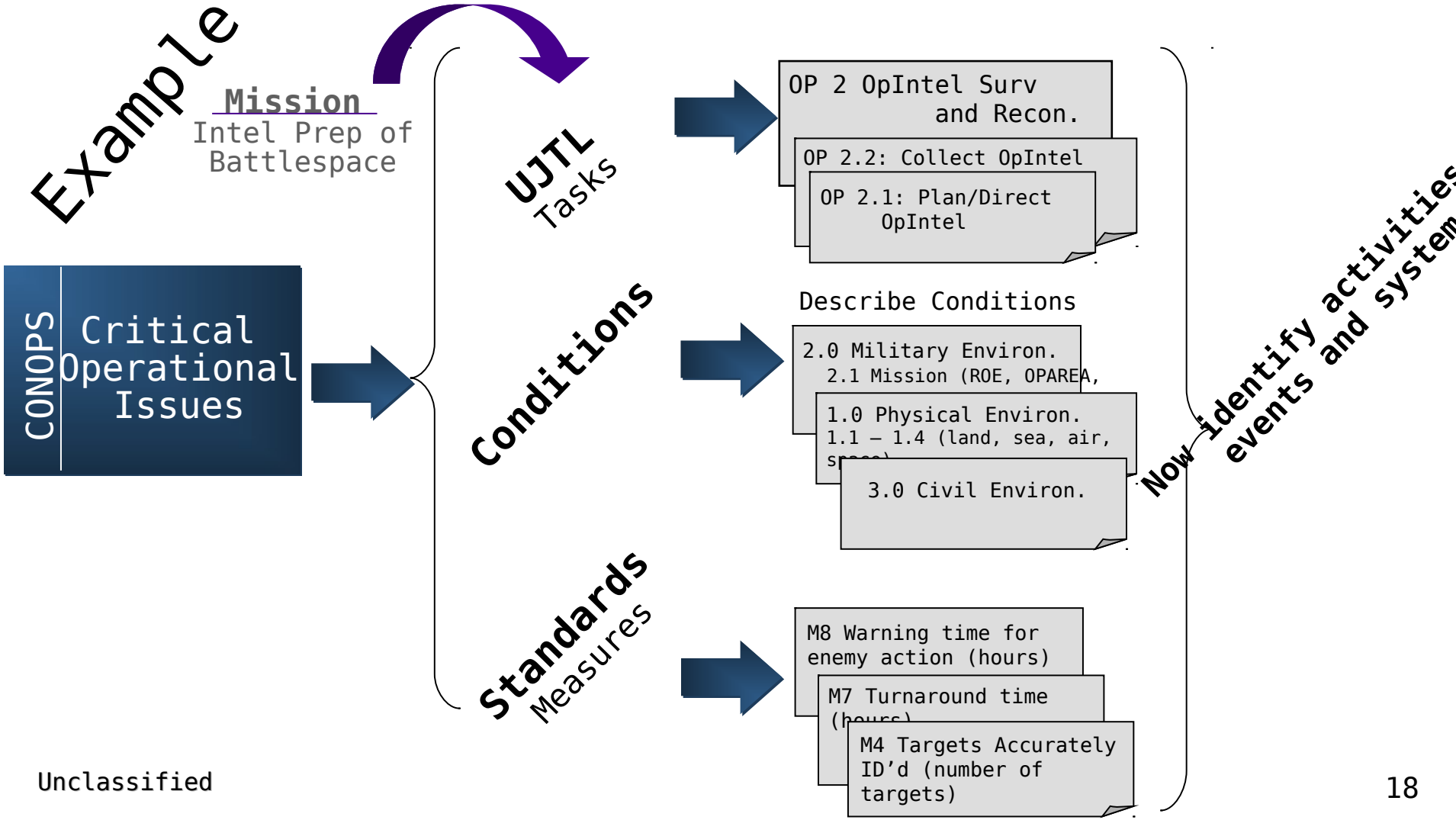
CONOPS Objectives Drive Assessm

Capabilities vice Tool

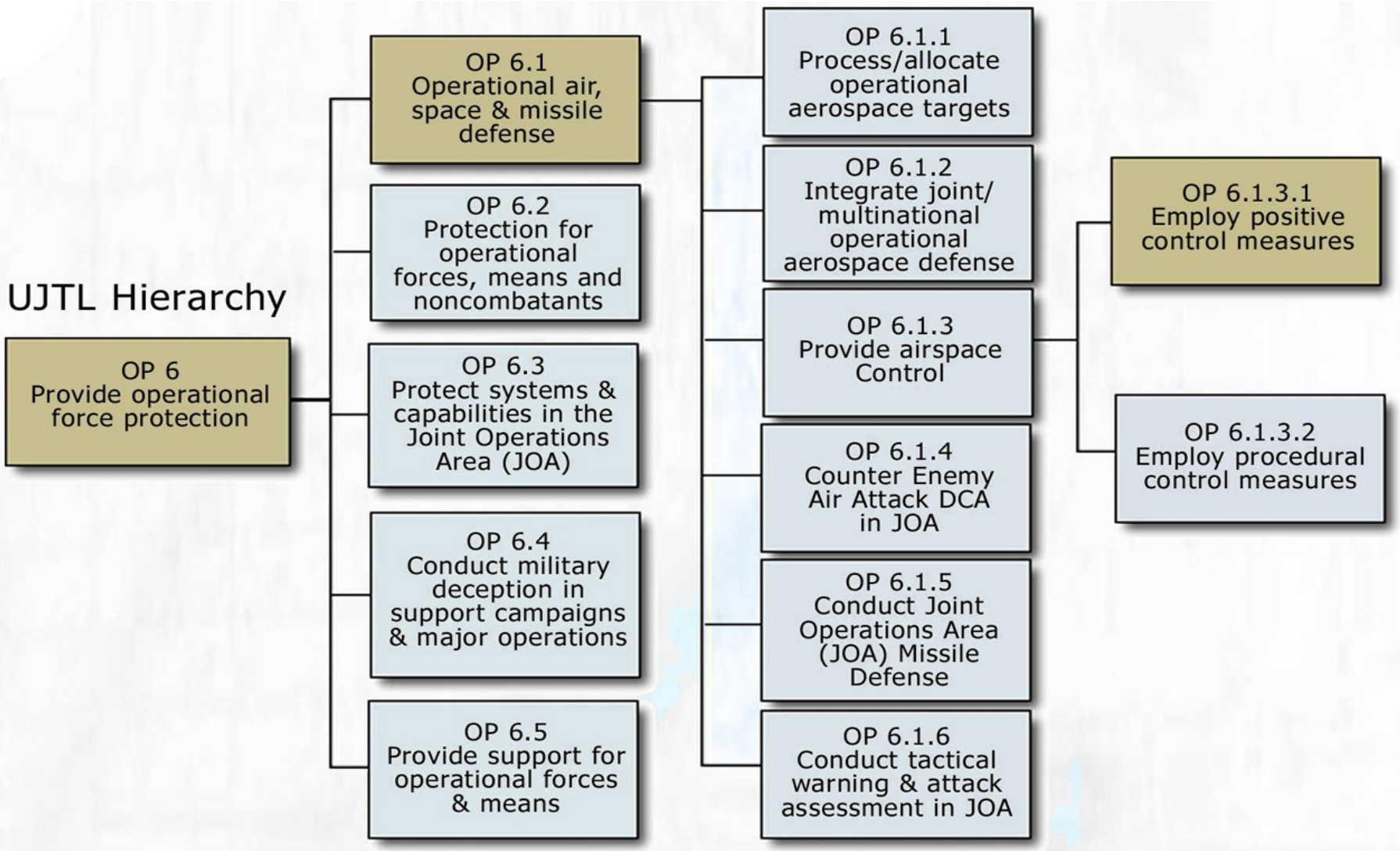
Thorough Mission Analys

Step 3: Assessment Process

- Contract with an Operational Test Agency after the Mission Analysis process is complete.
- After a Mission Analysis, identify all UJTL tasks that must be perfomred to accomplish mis
- Identify all the civil, military and space conditions that are necessary for these tasks.
- Identify the standards to which you will need to perform the ULTL tasks.



Mission Assessment Process
The UJTL


UJTL Hierarchy
OP 6
Provide operational force protection
OP 6.1
Operational air, space & missile defense
OP 6.2
Protection for operational forces, means and noncombatants
OP 6.3
Protect systems & capabilities in the Joint Operations Area (JOA)
OP 6.4
Conduct military deception in support campaigns & major operations
OP 6.5
Provide support for operational forces & means
OP 6.1.1
Process/allocate operational aerospace targets
OP 6.1.2
Integrate joint/ multinational operational aerospace defense
OP 6.1.3
Provide airspace Control
OP 6.1.4
Counter Enemy Air Attack DCA in JOA
OP 6.1.5
Conduct Joint Operations Area (JOA) Missile Defense
OP 6.1.6
Conduct tactical warning & attack assessment in JOA
OP 6.1.3.1
Employ positive control measures
OP 6.1.3.2
Employ procedural control measures

OP 5 PROVIDE OPERATIONAL COMMAND AND CONTROL (C2)

Acquire and Communicate Operational Level Information and Maintain Status
OP 5.1

OP 5.1.1
Communicate Operational Information

OP 5.1.2
Manage Means of Communicating Operational Information

OP 5.1.3
Determine Commander's Critical Information Requirements

*OP 5.1.4
Maintain Operational Information and Force Status

OP 5.1.5
Monitor Strategic Situation

OP 5.1.6
Preserve Historical Documentation of Joint /Combined Operations or Campaigns

OP 5.1.7
Coordinate Combat Camera Activities

OP 5.1.8
Execute C4 Policies and Procedures for the Joint Operations Area (JOA)

OP 5.1.9
Coordinate Information Assurance (IA) Procedures

OP 5.1.10
Implement Electromagnetic Spectrum Management, Policy, Plans, Programs, and Direction

OP 5.1.11
Provide Positive Identification of Friendly Forces Within the Joint Operations Area (JOA)

Assess Operational Situation
OP 5.2

OP 5.2.1
Review Current Situation (Project Bran

OP 5.2.2
Formulate Crisis Assessment

OP 5.2.3
Project Future Campaigns and Major O (Sequels)

APPENDIX A TO ENCLOSURE E

SUGGESTED OPERATIONAL TEMPLATES BY UJTL TASK
COMMAND AND CONTROL WARFARE

Description:

- ***The integrated use of operations security (OPSEC), military deception, psychological operations (PSYOP), electronic warfare (EW), and physical destruction. These operations are all mutually supported by intelligence with the intent of denying information, influencing, degrading or destroying the enemy's command and control capabilities, while protecting friendly command and control capabilities against such actions.***

Search Documents:

JP 1-02, JP 2-0, JP 3-0, CJCSM 3500.04B, JP 4-02.2, JP 5-0, JP 6

Command and Control Warfare

	DESCRIPTION
2.1	Conduct Attack on Theater Strategic Targets/Target Sets using Lethal Means
2.2	Conduct Nonlethal Attack on Theater Strategic Targets/Target Sets using Nonlethal Means
4.1	Issue Theater Strategic Operation Plans, Orders, and ROE
3.1	Employ Theater Operations Security (OPSEC)
4	Conduct Deception in Support of Theater Strategy and Campaigns
2.4	Conduct Operations in Depth
2.4.8	Conduct Unconventional Warfare in the Joint Operations Area (JOA)
2.5	Conduct Offensive Operations in the Joint Operations Area (JOA)
4.1	Evaluate, Integrate, Analyze, and Interpret Operational Information
2.1	Provide Close Air Support Integration for Surface Forces
2.2.1	Employ PSYOP in the Joint Operations Area (JOA)
2.2.2	Employ Electronic Attack (EA) in the Joint Operations Area (JOA)
2.2.3	Employ Information Attack in the Joint Operations Area (JOA)
2.2.4	Conduct Attack on Personnel, Equipment, and Installations using Nonlethal Means
3.1	Conduct Operational Mission Analysis
3.3	Determine Operational End State
4.3	Provide Rules for Use of Force
5.1	Develop a Joint Force Command and Control Structure
6	Coordinate Operational Information Operations (IO)
3.1	Employ Operations Security (OPSEC) in JOA
4.1	Develop Operational Deception Plan

OP 5.1 Acquire and Communicate Operational Level Information and Maintain Status

To obtain information on the joint operations area (JOA) military objectives, enemy operational forces and centers of gravity, friendly operational forces, terrain, and weather for JFCs, staffs, and subordinates. To translate this information into usable form and to retain and disseminate it to subordinate JTFs and functional and Service components. This activity includes informing and advising the operational level commander and securing an understanding of strategic guidance or an understanding of national and multinational policy, objectives, strategic aims, other elements of national and multinational power (for example, political, economic, informational), and theater strategic objectives. This task includes interfacing with friendly and enemy (in occupied territory) civilian government authorities in the JOA. This activity includes disseminating any type of information via necessary C4 systems.

(JP 2-0, 2-01, 3-0, 3-01.1, 3-07.1, 3-13.1, 6-0, 6-02) (JP 3-07.5, 3-13.1, 3-55.1, 3-56.1, 6-02, CJCSM 3122.03, CJCSM 3141.01, CJCSM 3500.05)

Doctrine and tactical references

JOINT CONDITIONS

ENCLOSURE C

C 2.0 MILITARY ENVIRONMENT

Those factors related to the mission, command structure, and forces. These factors can apply to US forces, allied and coalition forces, neutral forces, and enemy forces.

C 2.1 MISSION

Those factors that frame and influence the execution of the mission assigned or understood.

DESCRIPTORS:

- Straight forward (well within current capabilities)
- Moderately challenging (safely within current capabilities)
- Stressful (very demanding mission relative to current capabilities)

C 2.2.5.2 Modern Information & Intelligence Processing Systems

The availability of modern information systems in numbers and types.

DESCRIPTORS:

- Abundant (widely distributed throughout the force)
- Adequate (meets mission needs)
- Limited (not widely distributed and use closely controlled)
- Few (treated as "high value" systems and very closely controlled)

JOINT CONDITIONS

C 2.2.5.3 Military Systems Reliability

The qualities of reliability, maintainability, and sustainability built into military systems.

DESCRIPTORS:

- High (few breakdowns and those fixed without major effort)
- Acceptable (operates at or near established reliability standardsmaintainable in theater)
- Low (often breaks down or must be repaired by specialists in rear areas)

C 2.2.6 Interoperability

The ability of systems, units, or forces to interact and operate effectively with other systems, units, or forces.

DESCRIPTORS:

- Full (systems, units, or forces can integrate easily, both vertically and horizontally)
- High (systems, units, or forces can be integrated vertically and horizontally with few workarounds)
- Some (systems, units, or forces can only partially interoperate)
- None

OPERATIONAL TASKS, MEASURES, AND CRITERIA

M1	Hours	Since latest information collected.
M2	Hours	To establish connectivity with component intelligence agencies, combatant command and national intelligence agencies (after arrival).
M3	Minutes	To process and disseminate status information (to subordinate units).
M4	Percent	Of available information examined and considered in latest status reporting.
M5	Percent	Of critical information acquired and disseminated to subordinate commanders.
M6	Percent	Of organizations or units receiving latest information.
M7	Percent	Of subordinate commanders with uninterrupted communication with joint force headquarters.
M8	Percent	Of subordinate commanders in communication with joint force headquarters.
M9	Percent	Of C4 support systems, operational.
M10	Percent	Of C4 support systems meet command reliability standards.
M11	Percent	Of combatant command plans, reports, and other information, passed error free.
M12	Percent	Of C4 support systems equipment, down for unscheduled maintenance.
M13	Percent	Of information, not passed to or received by allies (lack of equipment interoperability).
M14	Percent	Of traffic, sent on nondedicated or non-DOD lines or circuits.
M15	Percent	Saturation of DOD communications circuits.
M16	Percent	Of time required expansion into other sectors accomplished.

Step 3: Assessment Process

- Contract with an Operational Test Agency after the Mission Analysis process is complete.
- After a Mission Analysis, identify all UJTL tasks that must be perfomred to accomplish mis
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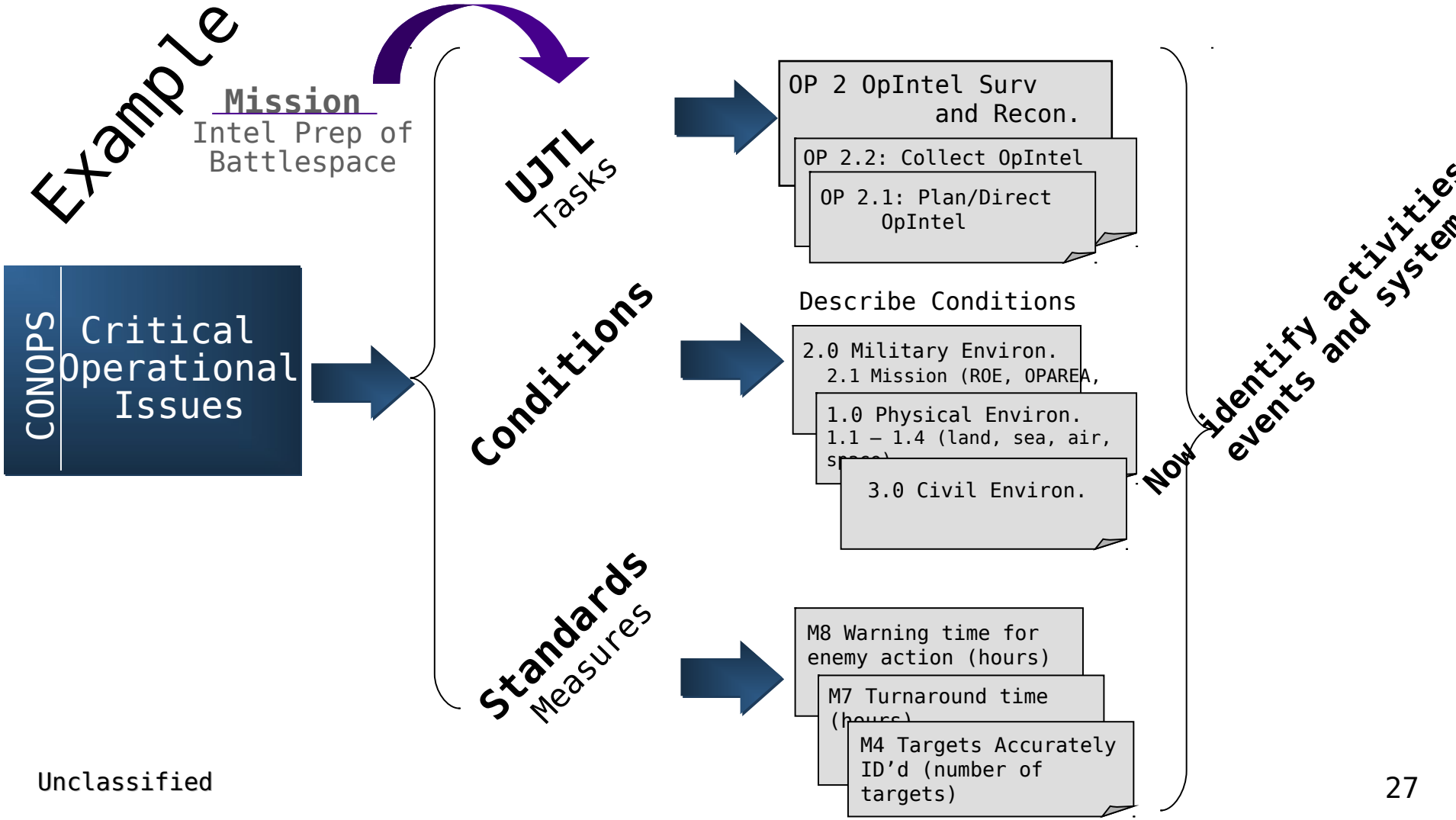


Step 3: Assessment Process

- After a UJTL Review, the tasks are further broken down into activities and events. Then you identify what capabilities are produced or created (information, data elements etc) as well as their attributes, thresholds and objectives.
- Identify all the producers/senders of information or capabilities as well as the users/receivers.
- Then identify what systems, or pathways are required to share these capabilities.

Measures

UJTL Tasks

OP 5.1.11 Provide Positive Identification of Friendly Forces Within the Joint Operations Area (JOA)

Activities

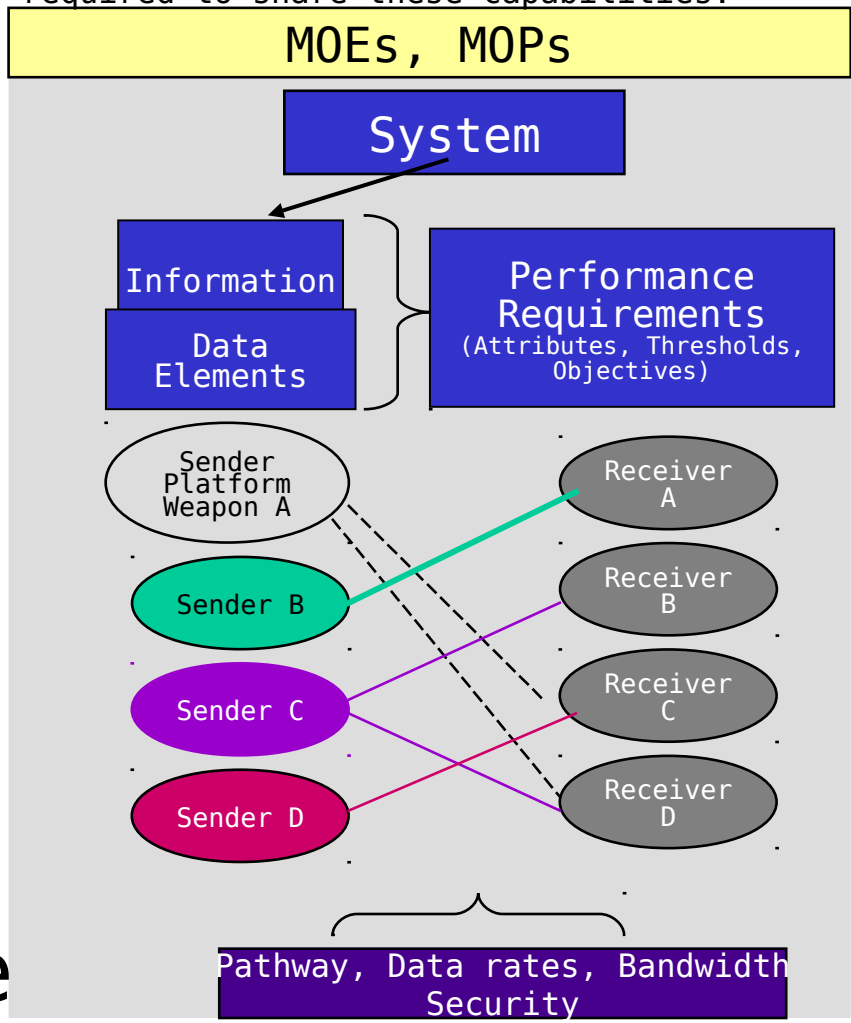
Ops Plan for Positive Identification of Friendly Forces

Events

- Develop CID Plan
- Coordinate CID Plan
- Evaluate CID Plan
- Finalize CID Plan

Disseminate CID Plan

Identify "Who, what, when, where, how" to complete tasks



Example

Unclassified

Step 3: Assessment Process

- Further identification of all the events necessary to support the mission, tasks and activities
- On this slide, the same activity " Ops Plan for Positive ID of Friendly Forces" requires additio
- There may be new senders and receivers, information, data elements, and systems.

UJTL Tasks

OP 5.1. 11 Provide Positive Identification of Friendly Forces Within the Joint Operations Area (JOA)

Activities

Ops Plan for Positive Identification of Friendly Forces

Events

- Employ Sensors for Positive Identification of Friendly Forces
- Input procedures into all sensors, weapon systems
- Process all data from sensors, weapon systems
- Evaluate data against procedures
- Designate all Friendly Forces

Identify "Who, what, when, where, how" to complete tasks

Example

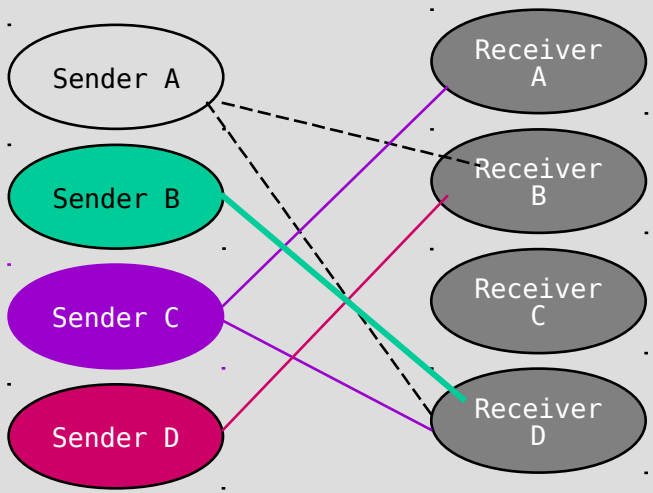
MOEs, MOPs

System

Information

Data Elements

Performance Requirements
(Attributes, Thresholds, Objectives)



Pathway, Data rates, Bandwidth
Security

Unclassified

Step 3: Assessment Process

- Further identification of all the events necessary to support the mission, tasks and activi
- On this slide, the same activity " Ops Plan for Positive ID of Friendly Forces" requires ac
- Again, determine what information, data elements, systems, senders, receivers and pathways

Example

UJTL Tasks

OP 5.1. 11 Provide Positive Identification of Friendly Forces Within the Joint Operations Area (JOA)

Activities

Ops Plan for Positive Identification of Friendly Forces

Events

Search AOR

Detect contacts in AOR

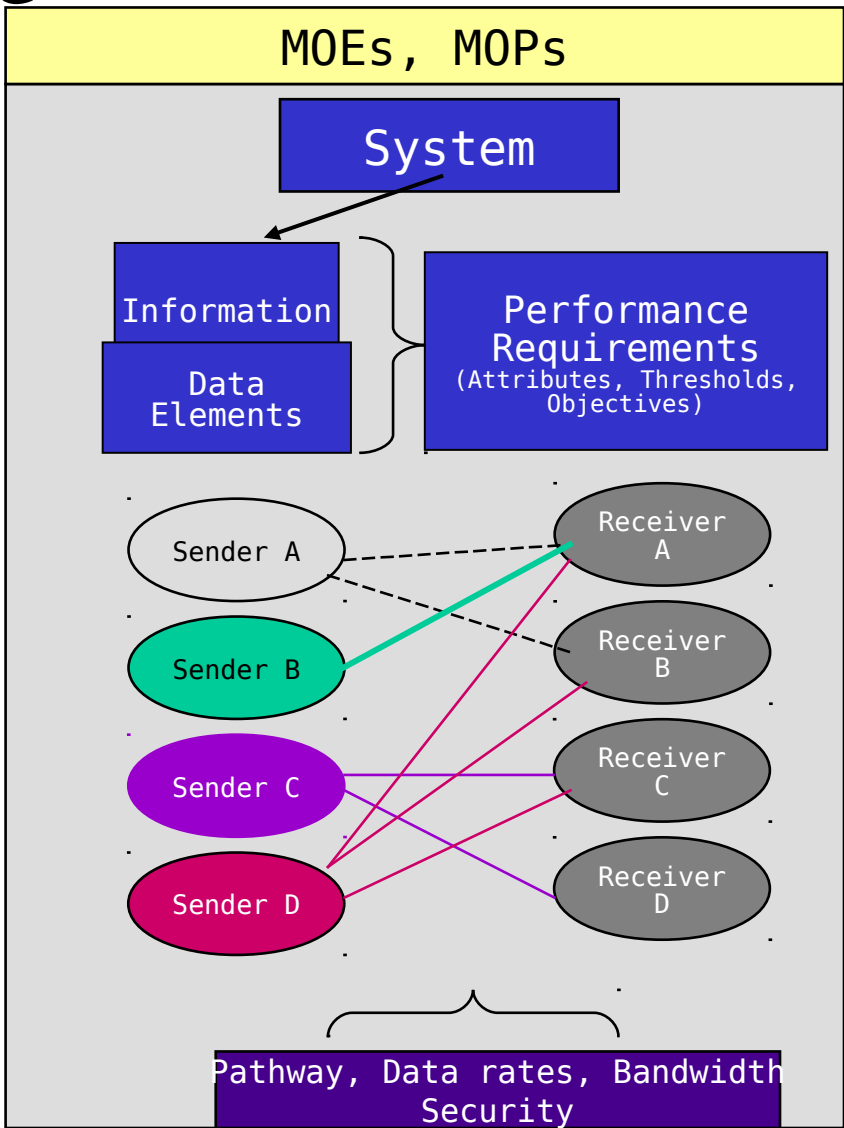
Evaluate data on contacts

Classify/ID all contacts

Designate friendly forces

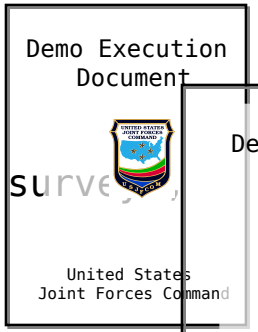
Communicate Friendly Force

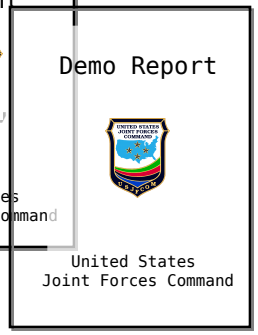
Identify "Who, what, when, where, how" to complete tasks



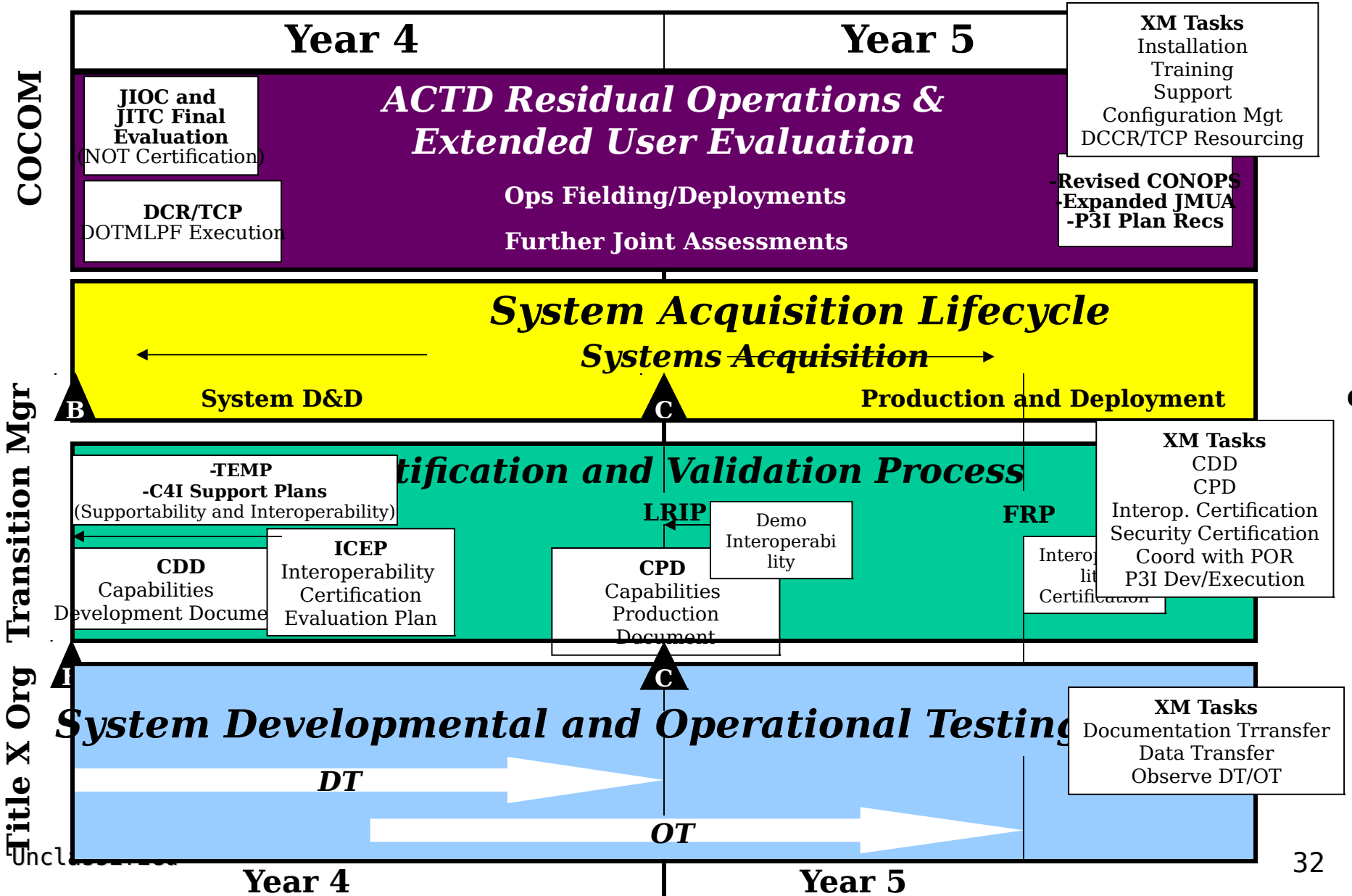
Step 4: Assessment Process

- Develop Integrated Assessment Plan that includes:
  - COI's.
  - Mission Tasks, conditions, standards.
  - Activities, events.
  - Information, data elements, systems, senders, receivers, pathways.
  - All attributes, thresholds and objectives.
- Plan for Assessment Events
  - Coordinate with J7, J9, JNTC, JCIET, JT&E for assessment venues.
  - Assessment Agency collects and analyzes data, commander's surveys, interviews.
  - Warfighters serve as operators, planners, observers.
- Publish Assessment Reports and make Final Joint Military Utility Recommendations

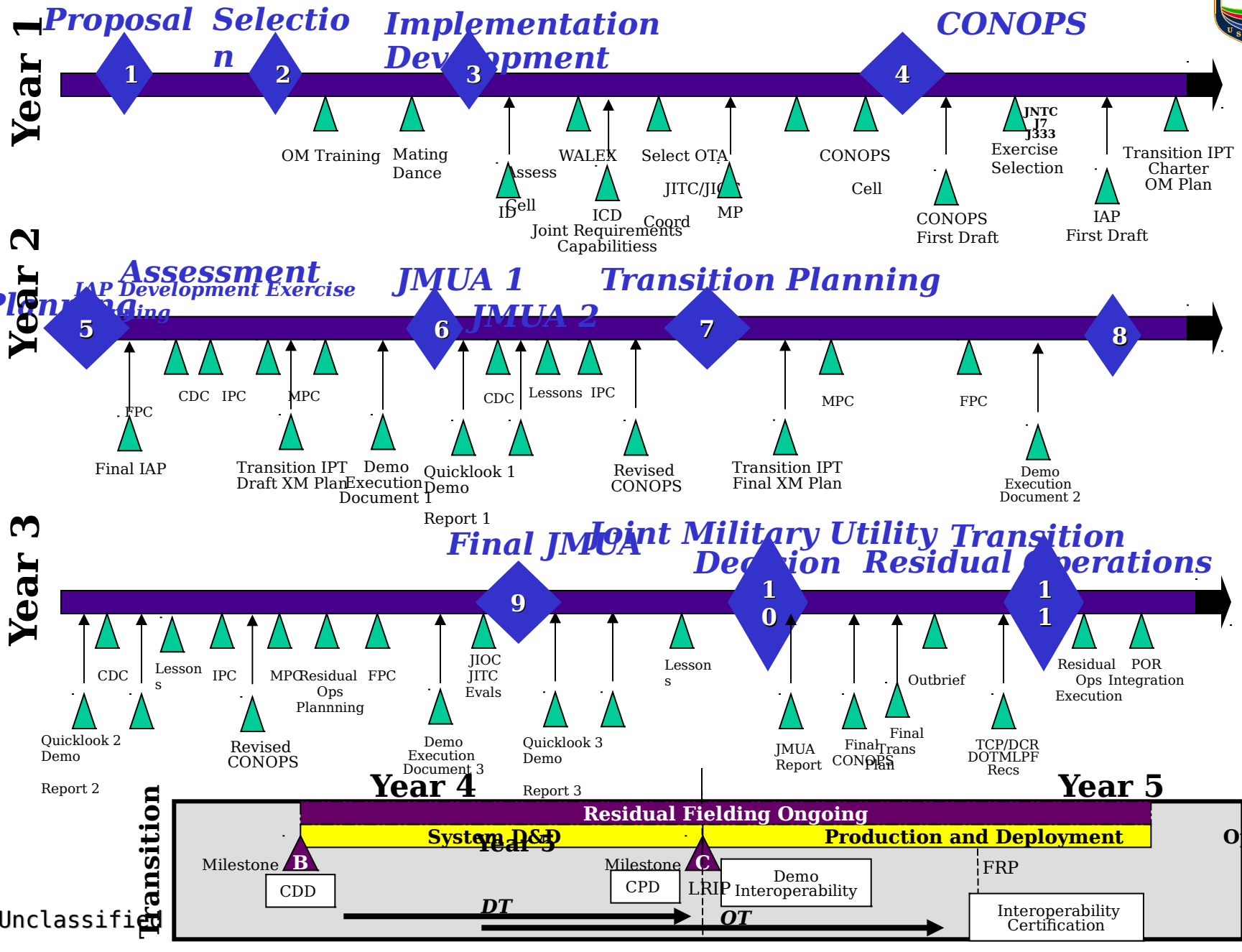




ACTD Transition Activities



ACTD Program Lifecycle



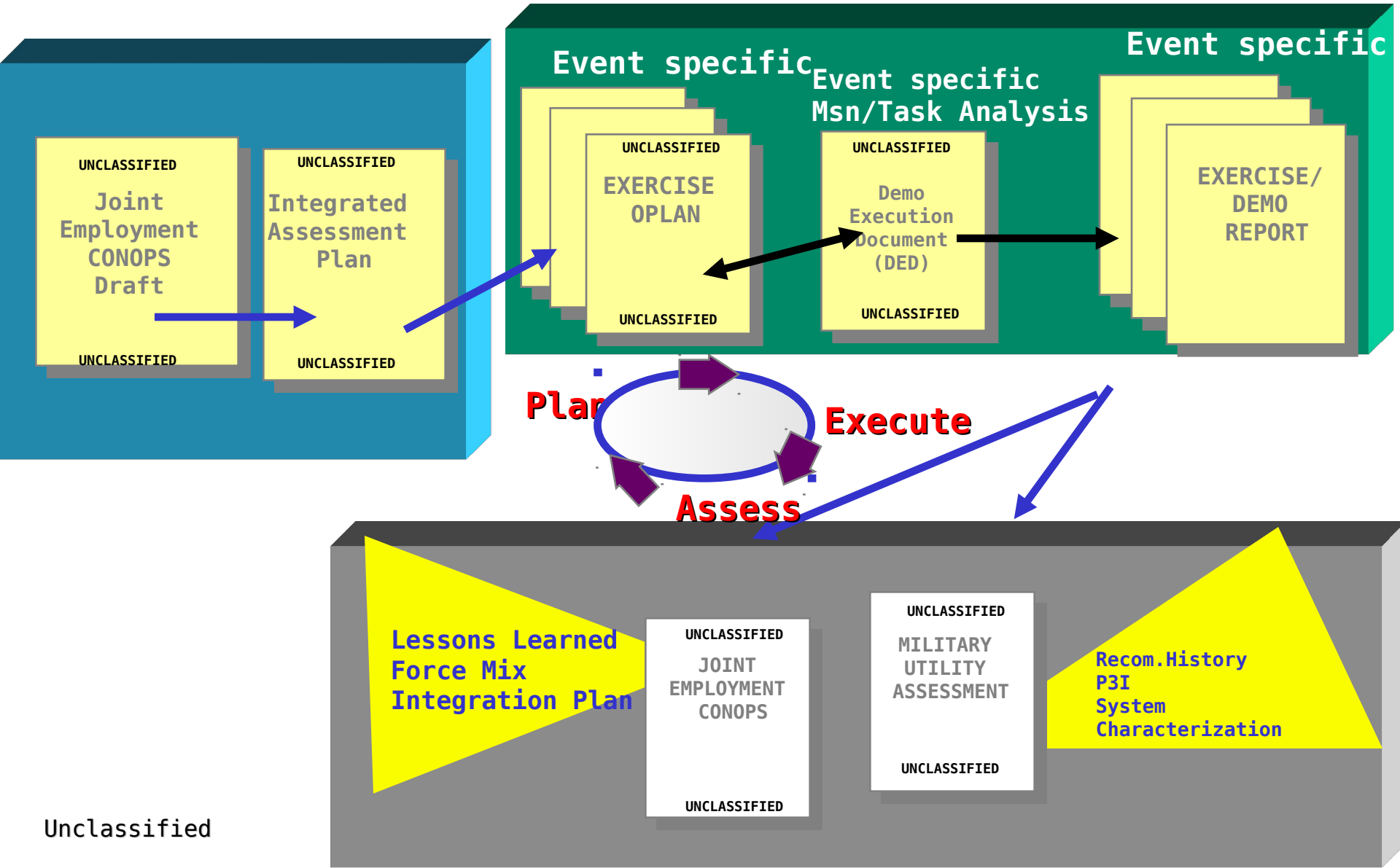
User COCOM Deliverables

- **Joint Concept of Operations**
  - **Employment manual focused on joint operations and integration**
  - **Force Mix recommendation and Force Integration Plan**
    - ***How many needed***
    - ***Who gets what when***
    - ***Configuration recommendation***
  - **Transformation Change Package (DOTMLPF recommendations (forwarded separately)**

Joint Military Utility Assessment

- **Joint Military Utility Recommendation (JMUA)**
- **Preplanned Product Improvement (P3I) recommendations/limitations**
- **Basic supportability, affordability determination**
- **System Characterization – key to mission, OPTEMPO, environment, strengths and vulnerabilities**

Planning Process Overview



Unclassified

COCOM Exit Criteria

JFCOM will exit the ACTD when the Command is confident that the Joint warfighter needs/ requirements will be met.

- Residual Management Plan is completed for the 1-2 year residual period before production (plan includes C2, pilot services, interim support, etc).
- Force Integration Plan is developed – who gets what and when.
- Force Mix Plan is recommended- quantities to be produced to satisfy National Strategy, doctrine and CONOPS.
- ACTD baseline system/configuration for fielding is established.
- DOTMLPF, Integration and Interoperability issues are documented, vetted and approved by JROC.
- Transition Plan Complete and Approved.
- Lead Service/Agency has "POM" planned/established